



Energy and transport

Author(s):	Woodcock J, Banister D, Edwards P, Prentice AM, Roberts I
Year:	2007
Journal:	The Lancet. 370 (9592): 1078-1088

Abstract:

We examine the links between fossil-fuel-based transportation, greenhouse-gas emissions, and health. Transport-related carbon emissions are rising and there is increasing consensus that the growth in motorised land vehicles and aviation is incompatible with averting serious climate change. The energy intensity of land transport correlates with its adverse health effects. Adverse health effects occur through climate change, road-traffic injuries, physical inactivity, urban air pollution, energy-related conflict, and environmental degradation. For the world's poor people, walking is the main mode of transport, but such populations often experience the most from the harms of energy-intensive transport. New energy sources and improvements in vehicle design and in information technology are necessary but not sufficient to reduce transport-related carbon emissions without accompanying behavioural change. By contrast, active transport has the potential to improve health and equity, and reduce emissions. Cities require safe and pleasant environments for active transport with destinations in easy reach and, for longer journeys, public transport that is powered by renewable energy, thus providing high levels of accessibility without car use. Much investment in major road projects does not meet the transport needs of poor people, especially women whose trips are primarily local and off road. Sustainable development is better promoted through improving walking and cycling infrastructures, increasing access to cycles, and investment in transport services for essential needs. Our model of London shows how increased active transport could help achieve substantial reductions in emissions by 2030 while improving population health. There exists the potential for a global contraction and convergence in use of fossil-fuel energy for transport to benefit health and achieve sustainability.

Source: [http://dx.doi.org/10.1016/S0140-6736\(07\)61254-9](http://dx.doi.org/10.1016/S0140-6736(07)61254-9)

Resource Description

Exposure :

weather or climate related pathway by which climate change affects health

Air Pollution, Unspecified Exposure

Geographic Feature:

resource focuses on specific type of geography

Urban

Geographic Location:

Climate Change and Human Health Literature Portal

resource focuses on specific location

Global or Unspecified

Health Co-Benefit/Co-Harm (Adaption/Mitigation):

specification of beneficial or harmful impacts to health resulting from efforts to reduce or cope with greenhouse gases

A focus of content

Health Impact:

specification of health effect or disease related to climate change exposure

Cardiovascular Effect, Diabetes/Obesity, Infectious Disease, Injury, Respiratory Effect

Intervention:

strategy to prepare for or reduce the impact of climate change on health

A focus of content

Medical Community Engagement:

resource focus on how the medical community discusses or acts to address health impacts of climate change

A focus of content

Mitigation/Adaptation:

mitigation or adaptation strategy is a focus of resource

Mitigation

Model/Methodology:

type of model used or methodology development is a focus of resource

Other Projection Model/Methodology

Other Projection Model/Methodology: uses modeled estimates to make its point

Population of Concern: A focus of content

Resource Type:

format or standard characteristic of resource

Research Article, Review

Timescale:

time period studied

Medium-Term (10-50 years)